

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-28 (Cancelled)

Claim 29. (Previously Presented) An emulsified fuel comprising a hydrocarbon liquid phase, an aqueous phase and at least one emulsifying agent and exhibiting a water/hydrocarbons ratio by weight ranging from 5/95 to 35/65, wherein the hydrocarbon phase comprises from 5 to 35% by weight of C₈ to C₂₂ normal paraffins, the aqueous phase being dispersed in the hydrocarbon phase.

Claim 30. (Previously Presented) The fuel as claimed in claim 29, wherein the hydrocarbon phase comprises from 5 to 35% by weight of C₁₃ to C₁₉ normal paraffins.

Claim 31. (Cancel)

Claim 32. (Cancel)

Claim 33. (Previously Presented) The fuel as claimed in claim 29, wherein the hydrocarbon phase comprises at least one petroleum fraction of gasoline, diesel fuel or kerosene type.

Claim 34. (Previously Presented) The fuel as claimed in claim 29, wherein the hydrocarbon phase comprises a mixture composed of one or more hydrocarbon fractions and of at least one fraction rich in said normal paraffins, comprising at least 50% by weight of said normal paraffins.

Claim 35. (Previously Presented) The fuel as claimed in claim 34, wherein said fraction rich in normal paraffins is a fraction of petroleum origin.

Claim 36. (Previously Presented) The fuel as claimed in claim 34, wherein said fraction rich in normal paraffins comprises synthetic paraffins obtained by oligomerization of

olefins comprising from 2 to 5 carbon atoms or by the Fischer-Tropsch synthesis starting from light hydrocarbons.

Claim 37. (Currently amended) The fuel as claimed in claim 34, wherein the said fraction rich in normal paraffins comprises at least one hydrotreated animal or vegetable oil and/or fat.

Claims 38-55. (Cancel)

Claim 56. (Previously Presented) A method for reducing emissions from heat engines or thermal machines, comprising the use of an emulsified fuel comprising a hydrocarbon liquid phase, an aqueous phase and at least one emulsifying agent and exhibiting a water/hydrocarbons ratio by weight ranging from 5/95 to 35/65, in which the hydrocarbon phase comprises from 5 to 35% by weight of C₈ to C₂₂ normal paraffins, the aqueous phase being dispersed in the hydrocarbon phase.

Claim 57. (New) The fuel as claimed in claim 29, wherein the hydrocarbon phase comprises from 8 to 20% by weight of said C₈ to C₂₂ normal paraffins.

Claim 58. (New) The fuel of claim 30, wherein said hydrocarbon phase comprises from 8 to 20% by weight of C₁₃ to C₁₉ normal paraffins.

Claim 59. (New) The fuel as claimed in claim 37, wherein the oil and/or the fat is selected from the group consisting of:

vegetable oils;

animal fats;

waste food oils or fats;

and mixtures of the above products.

Claim 60. (New) The fuel as claimed in claim 34, wherein the hydrocarbon fraction, with which the fraction rich in normal paraffins is mixed in order to obtain said hydrocarbon phase, is selected from the group consisting of gasoline fractions, middle distillates, kerosene

fractions and diesel fuel fractions, biofuels, esterified or nonesterified vegetable oils, and the mixtures of such fractions.

Claim 61. (New) The fuel as claimed in claim 34, wherein the hydrocarbon fraction, with which the fraction rich in normal paraffins is mixed in order to obtain said hydrocarbon phase, comprises at least one fraction selected from the group consisting of intermediate vacuum distillates, heavy vacuum distillates or bottom cuts.

Claim 62. (New) The fuel as claimed in claim 29, wherein said emulsifying agent is between 0.5 and 5% by weight.

Claim 63. (New) The fuel as claimed in claim 29, wherein the emulsifying agent comprises at least one nonionic organic emulsifying agent selected from the group consisting of fatty acids and their derivatives, polyol esters or functionalized polymers.

Claim 64. (New) The fuel as claimed in claim 29, further comprising a bactericide and/or a fungicide.

Claim 65. (New) The fuel as claimed in claim 29, further comprising at least one antifreeze selected from the group consisting of alcohols, glycols, derivatives of glycols or of alcohols, or saline solutions.

Claim 66. (New) The fuel as claimed in claim 29, further comprising at least one soot remover selected from the group consisting of catalysts based on magnesium, calcium, barium, cerium, copper, iron or their mixtures.

Claim 67. (New) The fuel as claimed in claim 29, further comprising at least one cetane number improver selected from the group consisting of alkyl nitrates or organic peroxides.

Claim 68. (New) The fuel as claimed in claim 67, wherein the ratio of the content by weight of C₈ to C₂₂ normal paraffins in the hydrocarbon phase to the content by weight of cetane number improvers in the engine fuel is between 5/0.5 to 15/0.05.

Claim 69. (New) The fuel of claim 68, wherein said ratio is between 5/0.3 and 15/0.1.

Claim 70. (New) The fuel as claimed in claim 34, wherein said fuel's sulfur content, determined according to the standard NF M 07-100, is less than or equal to 350 ppm.

Claim 71. (New) The fuel as claimed in claim 70, wherein said fuel's sulfur content is less than or equal to 50 ppm.

Claim 72. (New) The fuel as claimed in claim 34, wherein said fuel's content of polycyclic aromatic hydrocarbons, determined according to the standard IP 391, is less than or equal to 11% by weight.

Claim 73. (New) The fuel as claimed in claim 72, wherein said fuel's content of polycyclic aromatic hydrocarbons is less than or equal to 6% by weight.

Claim 74. (New) A process for the preparation of an emulsified fuel comprising a hydrocarbon liquid phase, an aqueous phase and at least one emulsifying agent, wherein said fuel exhibits a water/hydrocarbons ratio by weight ranging from 5/95 to 35/65, in which the hydrocarbon phase comprises from 5 to 35% by weight of C₈ to C₂₂ normal paraffins, and the aqueous phase is dispersed in the hydrocarbon phase.

Claim 75. (New) The process of claim 74, further comprising at least one petroleum fraction of gasoline, diesel fuel or kerosene type, comprising from 5 to 35% by weight of C₈ to C₂₂ normal paraffins; then emulsifying, in the presence of at least one emulsifying agent, the hydrocarbon phase with an aqueous phase according to a water/hydrocarbons ration by weight ranging from 5/95 to 35/65.

Claim 76. (New) The process of claim 74, further comprising mixing one or more hydrocarbon fractions and at least one fraction comprising at least 50% by weight of C₈ to C₂₂, preferably C₁₃ to C₁₉, normal paraffins, so as to obtain a hydrocarbon phase comprising from 5 to 35% by weight of C₈ to C₂₂ normal paraffins; then emulsifying, in the presence of at least one emulsifying agent, the hydrocarbon phase with an aqueous phase according to a water/hydrocarbons ratio by weight ranging from 5/95 to 35/65.

Claim 77. (New) The process of claim 74, wherein said petroleum fraction of gasoline, diesel fuel or kerosene type comprises from 5% to 35% by weight of C_{13} to C_{19} normal paraffins.

Claim 78. (New) The process of claim 74, wherein said petroleum fraction comprises from 8-20% by weight of C_8 to C_{22} normal paraffins.

Claim 79. (New) The process of claim 74, wherein said petroleum fraction comprises from 10 to 20% weight C_8 to C_{22} normal paraffins.

Claim 80. (New) The process of claim 74, wherein said petroleum fraction comprises from 8 to 20% by weight of C_{13} to C_{19} normal paraffins.

Claim 81. (New) The process of claim 74, wherein said petroleum fraction comprises from 10 to 20% by weight of C_{13} to C_{19} normal paraffins.

Claim 82. (New) The process as claimed in claim 75, wherein said emulsifying is carried out by premixing the water and the emulsifying agent, followed by dispersion in the hydrocarbon phase then emulsifying using an appropriate device.

Claim 83. (New) The process as claimed in claim 76, further comprising simultaneous mixing of the hydrocarbon phase with the water and the emulsifying agent, then emulsifying using an appropriate device.

Claim 84. (New) The process as claimed in claim 74, wherein said aqueous phase is dispersed in the hydrocarbon phase, wherein said hydrocarbon phase and said emulsifying agent are suitable for use in engine fuel.

Claim 85. (New) The process in claim 74, wherein said engine fuel is for a diesel engine.

Claim 86. (New) The process fuel as claimed in claim 74, wherein said aqueous phase is dispersed in the hydrocarbon phase wherein said hydrocarbon phase and said emulsifying agent are suitable for use as fuel for thermal machines.

Claim 87. (New) The process as claimed in claim 86, wherein said hydrocarbon phase and said emulsifying agent are suitable for use as fuel for industrial or domestic boilers, furnaces, turbines and generators.

Claim 88. (New) The process as claimed in claim 87, wherein said aqueous phase is dispersed in the hydrocarbon phase, as Furnace Fuel Oil.